# **RESOLUTION NO. 2019-14**

A RESOLUTION OF THE VILLAGE COUNCIL OF THE BISCAYNE, VILLAGE OF KEY FLORIDA, AUTHORIZING THE VILLAGE MANAGER TO ISSUE A WORK ORDER TO CALVIN, **GIORDANO** INC. ASSOCIATES, **FOR DESIGN CRITERIA** PROFESSIONAL AND SERVICES LIMITED CONSTRUCTION **ADMINISTRATION SERVICES** RELATED TO STORM DRAINAGE IMPROVEMENTS AT THE 14 HARBOR POINT OUTFALL; AND PROVIDING FOR AN EFFECTIVE DATE.

**WHEREAS**, the Village of Key Biscayne ("Village") issued Request for Qualifications No. 2016-02-09 ("RFQ") for continuing professional engineering services; and

WHEREAS, pursuant to the RFQ, the Village Council selected Calvin, Giordano & Associates, Inc. ("Consultant") as one of the consultants to provide continuing professional engineering services and authorized the Village Manager to execute an agreement with Consultant; and

WHEREAS, Consultant has provided a proposal, attached hereto as Exhibit "A," (the "Proposal") for design criteria professional services and limited construction administration services relating to storm drainage improvements at the 14 Harbor Point Outfall (the "Project"); and

WHEREAS, the Village Council desires to authorize the Village Manager to issue a work order for the Project consistent with the Proposal and the professional services agreement entered into between the Village and Consultant; and

WHEREAS, the Village Council finds that this Resolution is in the best interest and welfare of the residents of the Village.

NOW, THEREFORE, BE IT RESOLVED BY THE VILLAGE COUNCIL OF THE VILLAGE OF KEY BISCAYNE, FLORIDA, AS FOLLOWS:

Section 1. Recitals. That each of the above-stated recitals are hereby adopted, confirmed, and incorporated herein.

Section 2. Authorization. That the Village Manager is hereby authorized to issue a work order to Consultant for the Project, consistent with and substantially in accordance with the Proposal attached hereto as Exhibit "A," in an amount not to exceed budgeted funds.

Section 3. Effective Date. That this Resolution shall be effective immediately upon adoption.

MCHAEL W. DAVEY,

PASSED and ADOPTED this 19th day of March, 2019.

ATTEST:

JENNIFER MEDINA, CMC

VILLAGE CLERK

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:

VILLAGE ATTORNEY



Calvin, Giordano & Associates, Inc.

# **Additional Services Agreement**

DATE:

February 27, 2019

RE:

Key Biscayne 14 Harbor Point Outfall O-13 Improvements

CLIENT:

Village of Key Biscayne

88 West McIntyre Street

Key Biscayne, FL 33149

ATTENTION:

Mr. Jake Ozyman, PE

CGA NO.:

16-8467.17

The following scope of services is proposed by Calvin, Giordano & Associates, Inc. (CGA) as requested by the Village of Key Biscayne (VILLAGE) for the above referenced project.

Currently, the VII I AGE is experiencing flooding within the Harbor Point Drive Right-of-Way, in the vicinity of the property known as 14 Harbor Point Drive. Currently, there are two existing catch basins in Harbor Point Drive Right-of-Way, adjacent to the project area, that convey stormwater runoff to the Biscayne Bay through an existing 6 inch storm drain that runs within a drainage easement along the northern property line of 14 Harbor Point Drive. The storm drain discharges via Outfall O-13. Outfall O-13 and its surrounding area are encompassed by mangroves. The 6 inch storm drain appears to be undersized and is getting clogged with debris and sediments. Replacing the storm drain with a larger pipe will alleviate the flooding and will assist the VILLAGE in accessing the pipe for maintenance purposes. It is CGA's understanding that the VILLAGE has executed the drainage easement with the property owner and the pipe shall be designed to be located within this easement. Mitigation for the mangroves will be required to construct the new storm drain and outfall.

The previous VILLAGE Engineering Consultant had prepared drainage calculations and models for the proposed improvements. CGA will review the drainage calculations and models and provide a design to replace the 6 inch storm drain.

The VILLAGE has requested that CGA provide civil engineering, environmental, and surveying services in order to prepare construction plans and technical specifications to install a new storm drain and outfall within the drainage easement. This proposal includes the civil engineering design, submission and approval of applicable permits, bidding assistance, and engineering services during construction. The specific scope of services is detailed as follows:

Civil Engineering / Roadway & Highway Design
Coastal Engineering
Code Enforcement
Construction Engineering & Inspection (CEI)
Construction Services
Data Technologies & Development

**Building Code Services** 

Electrical Engineering Engineering Environmental Services

Facilities Management Geographic Information

Systems (GIS)
Governmental Services
Indoor Air Quality

Landscape Architecture
Planning
Project Management

Redevelopment & Urban Design Surveying & Mapping

Traffic Engineering
Transportation Planning

Water / Utilities Engineering Website Development

1800 Eller Drive Sulte 600 Fort Lauderdale, FL 33316 954.921.7781 phone 954.921,8807 fax

www.cgasolutiona.com

# I. Professional Engineering Services

# A. Civil Engineering

# 1. Project Management and Coordination

• CGA shall provide project management and coordination services throughout the design, permitting, bidding, and engineering services during construction phases. This will include the coordination with the CGA design team, civil plan schedule adherence, and attendance of two (2) meetings with the VILLAGE to discuss each design phase submittal and review comments received. This task will also include the prompt resolutions of any issues which may arise during the design, permitting, or construction process. This budget is based on one (1) hour per week, per the estimated 38-week schedule.

# 2. Pre-design and Data Collection

- Review existing Miami-Dade County Department of Regulatory and Economic Resources (DRER) nermit(s).
- Review Outfall O-13 Improvements plans and calculations prepared by the previous VILLAGE Consultant.
- Review of the Boundary and Topographic Survey prepared by the VILLAGE's Consultant and CGA, and coordinate with the Surveyor if any additional information is required.
- Perform a field observation to compare the existing site conditions to the available plan and survey information acquired, and identify physical obstacles and constraints.
- CGA shall retain the services of a Subsurface Utility Exploration (SUE) Sub-Consultant to provide services associated with locating the underground utilities.
  - Coordinate with the Subsurface Utility Exploration (SUE) Sub-Consultant in order to verify where existing utilities are located in order to avoid conflicts with the proposed drainage improvements.
  - Provide underground locating service utilizing Ground Penetrating Radar (GPR) for the horizontal placement of the underground utilities. Meet with the GPR technician and deduce the findings to the civil plans. Survey will include scope to locate pavement markings of GPR and show on topographic survey.

- This task includes eight (8) test holes to verify the vertical placement of the underground utilities.
- GPR is the best available technology to detect the presence of underground piping. However, no results are guaranteed. The actual presence, size, or elevation of underground piping can only be exactly confirmed by excavation.
- CGA shall retain the services of a Geotechnical Engineering Sub-Consultant to provide services associated with the existing soils.
  - Coordinate with the Geotechnical Engineering Sub-Consultant for analysis of the subsurface soil conditions.
  - The Geotechnical Engineering Sub-Consultant proposes to perform three (3) Standard Penetration Test (SPT) borings in general accordance with ASTM D-1586 specifications to a depth of 15 feet within the project area.
  - At the completion of the onsite work, the Sub-Consultant will provide an engineering report describing their findings and general site preparation and foundation design recommendations for support of the proposed construction.
  - It is assumed that the site is accessible to truck mounted drilling equipment. Sunshine 811 will be called in order to locate the underground utilities prior to performing the onsite work.
- Review findings and discuss proposed improvements with the VILLAGE prior to preparing the Construction Plans.

### 3. 60% Design Development Phase

- Prepare 60% Construction Plans consisting of the following:
  - Cover, Legend & Abbreviations, and General Notes Plans
  - Demolition Plan
  - Erosion Control Plan and Details
  - Paving, Grading and Drainage Plan
  - Paving, Grading and Drainage Details

Cross Section Diam

- Prepare Preliminary Pipe Sizing Calculations.
- Prepare index and draft of proposed Technical Specifications for site civil related construction improvements.

### 4. Permitting

- Prepare and process the permit application for civil engineering site work through the agency listed below. This task includes reviewing, addressing, and responding to the comments from the agency for construction. All permits fees shall be paid directly by Owner.
  - Application for Class II Permit for the drainage improvements
- Attend one (1) meeting with DRER to discuss permit package and requirements.

#### 5. 100% Construction Document Phase

- Prepare 100% Construction Plans consisting of the following:
  - Cover, Legend & Abbreviations, and General Notes Plans
  - Demolition Plan
  - Erosion Control Plan and Details
  - Paving, Grading and Drainage Plan
  - Paving, Grading and Drainage Details
  - Cross Section Plan
- Prepare Final Pipe Sizing Calculations.
- Prepare written Final Technical Specifications for site civil related improvements.
- Prepare Engineer's Estimate of Probable Cost.

 Prepare and submit 100% Construction Plans, Final Pipe Sizing Calculations, Technical Specifications, and Engineer's Cost Estimate to the VILLAGE for review. CGA shall submit a PDF and hard copy to the VILLAGE.

# 6. Engineering During Bidding Phase

- CGA will submit to the VILLAGE Bid Documents. A PDF and five (3) nard copies will be provided to the VILLAGE. The VILLAGE will be responsible for distribution of the bid packages to the potential bidders.
- CGA will prepare and administer the pre-bid meeting at Village Hall and prepare corresponding minutes for distribution by the VILLAGE.
- CGA will assist the VILLAGE in the preparation of up to two (2) addenda and will prepare written responses to questions (RFIs) raised at the pre-bid conference and during the bidding process for applicable CGA designed components. The VILLAGE will be responsible for the distribution of the addenda.
- CGA will prepare a bid tabulation and evaluation to the VILLAGE regarding the most responsive and responsible bidder.
- CGA will provide conformed Construction Documents with revisions due to RFI questions and responses during bidding.

### 7. Engineering During Construction

• It is anticipated that CGA will not provide full Construction Management services for this project: however, limited construction observation shall be performed in order to certify the project with the permitting agencies.

#### • Pre-Construction Conference

 CGA will attend the Pre-Construction Conference with the Contractor and the VILLAGE. The VILLAGE representatives will administer meeting.

#### Shop Drawing Review

- Receive and review civil shop drawings which the Contractor is required to submit for general conformance with design criteria and Contract Documents. Return shop drawings and submittals in accordance with the Contract Documents. The Shop Drawing Review item includes one (1) initial review of shop drawings and one (1) review following any required revisions. It is anticipated that up to four (4) shop drawings are included in the Shop Drawing Review item.

### Construction Meetings

- CGA will attend periodic construction meetings, as required for permit certification (up to 4 meetings total), with the Contractor, VILLAGE, and appropriate regulatory agencies in regards to construction of the CGA designed components of the project.

### Construction Clarifications

Respond in writing to as many as two (2) Contractor's Request for Information (RFI) regarding the design documents during the construction period. CGA shall issue interpretations and clarifications of the Contract Documents, along with associated support materials, as requested by the Contractor. These interpretations will be rendered and a response prepared and submitted to the VILLAGE's Construction Manager in a timely manner, in accordance with the Construction Contract Documents. The Construction Clarifications terms includes coordination with applicable design professionals as needed.

# • Substantial & Final Inspections

- Preparation and distribution of inspection punch list(s) at substantial and final walk-thru's.

#### Certification of Construction Completion

- CGA will provide necessary documents to close out applicable regulatory permitting for the project to obtain acceptance for operation of the systems in accordance with the applicable permits. It is assumed that all of the portions of the project will be certified at the same time and no partials will be required by the Contractor.

#### 8. Other Services

- The only services or meetings included in this contract are those identified above. If the VILLAGE requires additional services not specifically included in the scope of work identified above, an Additional Services Agreement (ASA) shall be prepared.
- The following items are NOT included in this agreement but may be provided upon request through an additional services agreement proposal, as needed:
  - village of Key Biscayne Building Department Dry-Kun submittal(s)

- Basin wide drainage calculations
- Stage-storage calculations
- Hydraulic or hydrologic modeling
- Sanitary sewer improvements within private property
- Seawall design or improvements within sovereign submerged lands
- Roadway and pavement markings and signage improvements

#### II. Professional Environmental Services

- A. CGA shall provide environmental permitting services through Miami-Dade Department of Regulatory and Economic Resources (DRER) to obtain a Class
  - 1. Conduct the necessary on-site inspections to collect the field data required to document the existing natural resource conditions and potential for impacts with the implementation of the drainage project.
  - 2. Prepare the environmental documents and analyses and other required environmental submittal documents for inclusion in the application submittal package to DRER.
  - 3. Complete the applications form, obtain signatures and checks from the Village for the application fee and the permit fee, compile all required documents, and submit the application package.
  - 4. Respond to two sets of requests for additional information from DRER.
  - 5. Water quality testing, and services to design a mitigation plan are not a part of this proposal.
  - **6.** Additional permits from the Army Corps of Engineers and Florida Department of Environmental Protection or the South Florida Water Management District if required as a result of this application will be addressed with prior approval from the Village as additional services.

### **III.** Professional Surveying Services

A. Topographic survey of all above ground improvements within the Harbor Point Road corridor adjacent to the property as described under Miami Dade County Property Appraiser Folio No: 304232-002-0200 and including the North 20 feet of said property from the street to the Hurricane Harbor waterway.

- **B.** Horizontal locations and vertical elevations being provided for asphalt pavement, concrete curb, landscape islands, walls, pavers, driveways, fences and above ground utilities. Visible above ground utilities refer to the visible structures (e.g., manholes, valve boxes, inlets, etc.) typically associated with storm drainage, sanitary sewer, potable water, electric, gas, telephone and cable television.
- manholes, two catch basins and one drainage outfall to include pipe sizes, material and direction of flow.
- **D.** Miscellaneous survey locations to include the front property line wall with column locations, the limits of mangroves within the north 20 feet of the property and any trees with a breast diameter of 3 inches or larger.
- E. Recover sufficient property corners within the property and adjacent properties to establish the property lines of the project parcel.
- F. Herizontal control will be referenced to the otate Plane Goordinate Dystem, Florida East Zone North American Datum NAD83/90 and elevations referenced to National Geodetic Vertical Datum of 1929 (NGVD29).
- G. All survey work will comply with the Standards and Practice requirements for Surveying and Mapping in the State of Florida, according to Chapter 51-17.052 of Florida Administrative Code, as adopted by the Board of Professional Surveyors, Chapter 472, Florida Statutes.

|     | COST OF THESE SERVICES (Lump Sum )        |             |  |
|-----|---|-------------|--|
| I   | Professional Engineering Services         |             |  |
|     | A Professional Civil Engineering Services | \$39,375.00 |  |
|     | Civil Engineering                         | \$31,755.00 |  |
|     | SUE Consultant                            | \$5,370.00  |  |
|     | Geotechnical Consultant                   | \$2,250.00  |  |
| II  | Professional Environmental Services       | \$3,760.00  |  |
| III | Professional Surveying Services           | \$2,625.00  |  |
| IV  | Meetings not included in I thru III       | Hourly      |  |
|     | TOTAL (Plus Hourly Services)              | \$45,760.00 |  |

# **AUTHORIZATION**

Kindly sign and return this authorization at your earliest convenience.

Calvin, Giordano & Associates, Inc.

will proceed upon receipt of authorization.

| Ву:   |                                      | Ву:           | Le |  |
|-------|--------------------------------------|---------------|----|--|
|       | Director of Public Works             | President     |    |  |
| Date: | 30000 30000 MANAGEMENT OF THE STREET | Date: 2/27/19 |    |  |